



A.D. 1860, *9th JUNE.* N^o 1419.

S P E C I F I C A T I O N

OF

CHARLES STEVENS.

SMOKE-CONSUMING FURNACES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,
25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 3d.

1860.



A.D. 1860, 9th JUNE. N° 1419.

Smoke-consuming Furnaces.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Charles Stevens at the Office of the Commissioners of Patents, with his Petition, on the 9th June 1860.—A communication from abroad by Toni Fontenay, of Grenoble in the Empire of France.

- 5 I, CHARLES STEVENS, Manager of the British & Foreign Office for Patents, No. 1^B, Welbeck Street, Cavendish Square, in the County of Middlesex, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN SMOKE-CONSUMING FURNACES,” (& that it has been communicated to me from abroad by Toni Fontenay, of Grenoble, in the Empire of France,) to be as follows:—
- 10 The improvements are applicable to furnaces of all descriptions, whether fixed or moveable. The details may, of course, vary, but the principle is as follows:—In the fire-box a sloping grate is fixed, on which the fuel (which is introduced by a door situated on the side) rests. The door can be placed with equally good result at the top of the box. The chimney or flue com-
- 15 municates with the box immediately beneath the grate, so as to facilitate as much as possible the drawing. The air necessary for the combustion enters at the same door by which the fuel is introduced, and passes through the fuel and grate, and after thus serving in the combustion escapes with the gases by the chimney. The space in the box beneath the grate serves to catch the
- 20 cinders, from which they are withdrawn by means of a door, serving also when the fire is required to be stoked. This door must shut sufficiently close that the drawing be not affected. In certain cases, however, when the layer

Stevens' Improvements in Smoke-consuming Furnaces.

of fuel is thick, an advantage is obtained by allowing a certain portion of air to enter by this door. Bellows also may be adapted to facilitate the combustion, the tube of the bellows being placed near the entrance door, but in this case both the entrance door and stoke-hole must be well closed during the working of the bellows.

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Printers to the Queen's most Excellent Majesty. 1860.

